IN THE CLAIMS:

Please cancel Claims 2, 3, and 5-24, without prejudice or disclaimer of subject matter. Please amend Claims 1 and 4 and add new Claims 25-30, as indicated below. The following is a complete listing of claims and replaces all prior versions and listings of claims in the present application:

1. (Currently Amended) An image pickup apparatus comprising:

image pickup means;

encoding means for encoding a moving picture signal output from the image pickup means using an intraframe encoding method and an interframe encoding method to generate an encoded image signal, the encoded image signal including therein a plurality of picture groups each constituted by an image signal of n frames (n: an integer equal to or larger than two) including intraframe-encoded pictures ~~frames~~ obtained through [[the]] intraframe encoding processing and interframe-encoded pictures ~~frames~~ obtained through [[the]] interframe encoding processing ~~process~~;

recording means for recording the encoded image signal generated by the encoding means on a recording medium; ~~and~~

transmission means for transmitting the encoded image signal generated by the encoding means to an external apparatus while maintaining an encoded state of the encoded image signal; and

control means for~~, in accordance with an instruction to start recording of the moving picture signal, controlling the recording means so as to start a recording operation from~~

~~the image signal of a frame corresponding to the instruction to start the recording operation, and for controlling the encoding means so as to change a structure of the picture groups generated after issue of the instruction to start the recording operation from a structure of the picture groups generated in and before the issue of the instruction to start the recording operation~~ controlling the encoding means and the recording means in accordance with an instruction to start a recording operation, issued during transmission of the encoded image signal by the transmission means, so as to start to record the encoded image signal from a frame thereof corresponding to the instruction to start the recording operation, and to change a number of intraframe-encoded pictures included in one picture group without changing a number of frames included in one picture group when the instruction to start the recording operation is issued, so that a number of intraframe-encoded pictures included in a picture group generated after issuance of the instruction to start the recording operation is smaller than a number of intraframe-encoded pictures included in a picture group generated before issuance of the instruction to start the recording operation.

2.-3. (Canceled).

4. (Currently Amended) An image pickup apparatus according to claim 1 [[3]], wherein the control means further controls the encoding means ~~so as~~ to insert one ~~frame of the~~ intraframe-encoded ~~frames~~ frame into [[one]] a picture group after the ~~issue~~ issuance of the instruction to start the recording operation, and ~~so as~~ to insert a plurality of ~~frames of the interframe-encoded~~ intraframe-encoded frames into [[one]] a picture group ~~in and~~ before the ~~issue~~ issuance of the instruction to start the recording operation.

5.-24. (Canceled).

25. (New) An image pickup apparatus comprising:

image pickup means;

encoding means for encoding a moving picture signal output from the image pickup means using an intraframe encoding method and an interframe encoding method to generate an encoded image signal, the encoded image signal including therein a plurality of picture groups each constituted by an image signal of n frames (n: an integer equal to or larger than two) including intraframe-encoded pictures obtained through intraframe encoding processing and interframe-encoded pictures obtained through interframe encoding processing;

recording means for recording the encoded image signal generated by the encoding means on a recording medium;

transmission means for transmitting the encoded image signal generated by the encoding means to an external apparatus while maintaining an encoded state of the encoded image signal; and

control means for controlling the encoding means and the recording means in accordance with an instruction to start a recording operation, issued during transmission of the encoded image signal by the transmission means, so as to start to record the encoded image signal from a frame thereof corresponding to the instruction to start the recording operation, and to change a rate of intraframe-encoded pictures included in one picture group without changing a rate of frames included in one picture group when the instruction to start the recording operation is issued, so that a rate of intraframe-encoded pictures included in a picture group generated after

issuance of the instruction to start the recording operation is lower than a rate of intraframe-encoded pictures included in a picture group generated before issuance of the instruction to start the recording operation.

26. (New) An image pickup apparatus according to claim 25, wherein the control means further controls the encoding means to insert one intraframe-encoded frame into a picture group after the issuance of the instruction to start the recording operation, and to insert a plurality of intraframe-encoded frames into a picture group before the issuance of the instruction to start the recording operation.

27. (New) An image pickup method comprising steps of:

generating a moving picture signal;

encoding the moving picture signal using an intraframe encoding method and an interframe encoding method to generate an encoded image signal, the encoded image signal including therein a plurality of picture groups each constituted by an image signal of n frames (n: an integer equal to or larger than two) including intraframe-encoded pictures obtained through intraframe encoding processing and interframe-encoded pictures obtained through interframe encoding processing;

recording the encoded image signal on a recording medium;

transmitting the encoded image signal to an external apparatus while maintaining an encoded state of the encoded image signal; and

controlling the encoding step and the recording step in accordance with an instruction to start a recording operation, issued during transmission of the encoded image signal in the transmission step, so as to start to record the encoded image signal from a frame thereof corresponding to the instruction to start the recording operation, and to change a number of intraframe-encoded pictures included in one picture group without changing a number of frames included in one picture group when the instruction to start the recording operation is issued, so that a number of intraframe-encoded pictures included in a picture group generated after issuance of the instruction to start the recording operation is smaller than a number of intraframe-encoded pictures included in a picture group generated before issuance of the instruction to start the recording operation.

28. (New) A method according to claim 27, wherein the control step includes controlling the encoding step to insert one intraframe-encoded frame into a picture group after the issuance of the instruction to start the recording operation, and to insert a plurality of intraframe-encoded frames into a picture group before issuance of the instruction to start the recording operation.

29. (New) An image pickup method comprising steps of:

generating a moving picture signal;

encoding the moving picture signal using an intraframe encoding method and an interframe encoding method to generate an encoded image signal, the encoded image signal including therein a plurality of picture groups each constituted by an image signal of n frames (n:

an integer equal to or larger than two) including intraframe-encoded pictures obtained through intraframe encoding processing and interframe-encoded pictures obtained through interframe encoding processing;

recording the encoded image signal on a recording medium;

transmitting the encoded image signal to an external apparatus while maintaining an encoded state of the encoded image signal; and

controlling the encoding step and the recording step in accordance with an instruction to start a recording operation, issued during transmission of the encoded image signal in the transmission step, so as to start to record the encoded image signal from a frame thereof corresponding to the instruction to start the recording operation, and to change a rate of intraframe-encoded pictures included in a picture group without changing a rate of frames included in a picture group when the instruction to start the recording operation is issued, so that a rate of intraframe-encoded pictures included in a picture group generated after issuance of the instruction to start the recording operation is lower than a rate of intraframe-encoded pictures included in a picture group generated before issuance of the instruction to start the recording operation.

30. (New) A method according to claim 29, wherein the control step includes controlling the encoding step to insert one intraframe-encoded frame into a picture group after issuance of the instruction to start the recording operation, and to insert a plurality of intraframe-encoded frames into a picture group before issuance of the instruction to start the recording operation.